F. W. FINKHOUSEN.

FIREPROOF SAFE.

APPLICATION FILED MAY 1, 1916.

1,229,250.

Patented June 12, 1917.

Fig 1

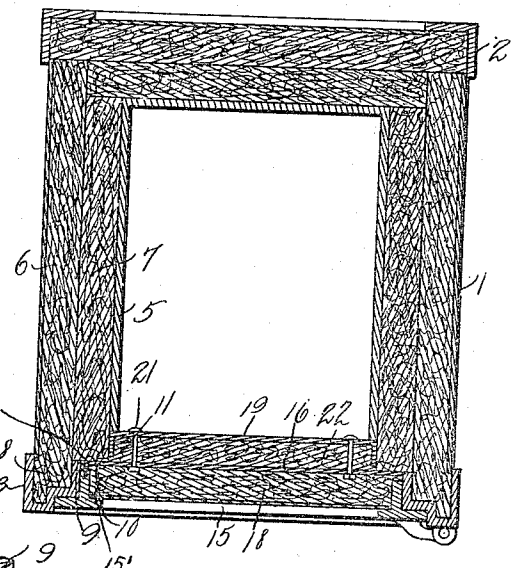


Fig 2

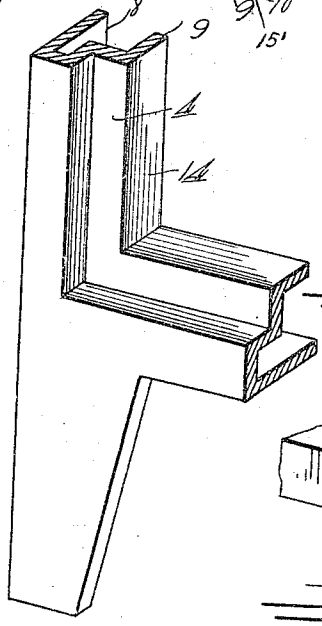


Fig 3

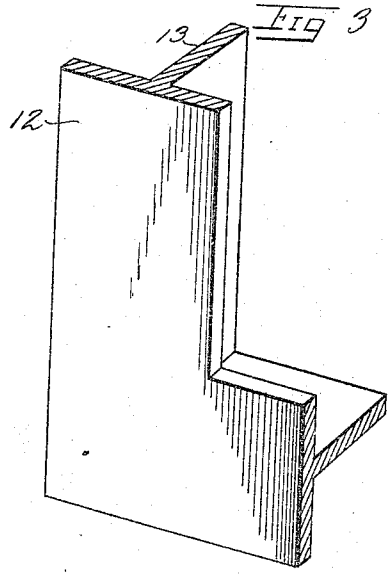


Fig 5

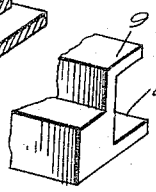
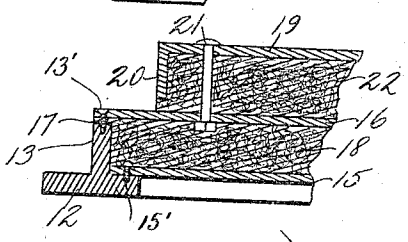


Fig 4



Witnesses

Inventor

F. W. Finkhousen

By

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK W. FINKHOUSEN, OF WREN, OHIO.

FIREPROOF SAFE.

1,229,250. Specification of Letters Patent. Patented June 12, 1917.

Application filed May 1, 1916. Serial No. 94,848.

To all whom it may concern:

Be it known that I, FRANK W. FINKHOUSEN, a citizen of the United States, residing at Wren, in the county of Van Wert, State of Ohio, have invented certain new and useful Improvements in Fireproof Safes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a fire proof safe.

An object of the invention resides in the provision of a safe which is so constructed that it will be impossible for the contents of the safe to become burned or scorched no matter how great a heat is applied to the outside thereof.

A further object of the invention resides in so constructing the safe that it will possess, in addition to its fire proof feature, strength and durability.

A further object of the invention resides in so constructing the safe that it will be light in weight and therefore easily transported.

With these and other objects in view, such as will appear as my description progresses, my invention comprises the combination and arrangement of parts as set forth in and falling within the scope of the appended claim.

In the drawing:

Figure 1 is a horizontal sectional view taken through a safe constructed in accordance with my invention;

Fig. 2 is a perspective view of a portion of the device showing the construction of the door casing;

Fig. 3 is a similar view showing the construction of the door frame;

Fig. 4 is an enlarged detail of the door, and

Fig. 5 is a fragmental detail showing a slightly modified door casing.

In the drawing I have illustrated an embodiment which includes an outside steel casing 1, which is rectangular in form and at the rear of which a metallic frame 2 constructed of angle steel is secured, which frame strengthens the casing as will be readily appreciated. A casing 3 which acts as a door casing is secured at the forward portion of the casing 1. This door casing 3 is provided with a recess 4 for the reception of the door frame which will later be described. An inner casing 5 of metal is provided, which casing is rectangular in form and is in spaced relation to the outer casing 1. Interposed between the outer casing 1 and inner casing 5 are asbestos mill board fillers 6 and 7. The forward edges of the fillers 6 extend into a channel 8 which is formed in the casing 3 and the forward edges of the fillers 7 protrude beyond the forward edge of the inner casing 5 and butt against the inner rear edges 9 of the casing 3 so that there is no metallic communication between the inner casing 5 and the door casing 3. This construction results in contact faces 10 and 11 of asbestos, the function of which will later appear.

A door frame is hinged to the casing 3 and this frame is rectangular in form and is constructed of T metal. One arm 12 of this T is adapted to fit into the recess 4 in the door casing 3 and the shank 13 of the T is adapted to contact with the innermost face of the casing 3, which face is indicated by the character 14. A metallic plate 15 is mounted in the door frame and is held in place by the frame. A second metallic plate 16 is mounted in spaced relation to the first plate 15 and this plate is spaced from the end of the shank 13 leaving a space which is designated by the character 17. This plate 16 is secured to the shank 13 by suitable machine bolts 13′ while the plate 15 is secured to the arm 12 of the door frame by similar bolts 15′. An asbestos mill board filler 18 is interposed between the plates 15 and 16 and entirely fills the space 17 between the plate 16 and the shank 13. A metallic plate 19 having flanges 20 extending at right angles thereto is mounted on the plate 16, being held in place by bolts 21. The edges of these flanges 20 are in spaced relation to the plate 16, however, as will be clearly seen in the drawing. An asbestos mill board filler 22 is interposed between the plate 16 and the plate 19 and maintains the said last mentioned plate in spaced relation to the first mentioned plate. Now when the door is closed the edge portion of the plate 16 will bear against the faces 10 at the forward portion of the filler 7 and the flanges 20 will contact with the face 11 on this filler.

Now it is to be noted in connection with the construction and mounting of this door that the plate 19 which closes the casing 5 is insulated from the plate 16, excepting

for the connecting bolts illustrated, and consequently any heat which reaches this plate 16 through the frame 12 and the plate 15 will not be conducted to the plate 19 excepting in such small degree as may pass by way of the securing bolts above referred to. Consequently the temperature of the inner casing 5 will not be materially raised. It is to be noted that there is no metallic communication between the outside casing 1 or the strengthening frames therefor and the inside casing 5 excepting by way of the few connecting bolts which do not conduct heat in any disadvantageous measure.

It will be seen that by constructing the door in this particular manner and mounting it upon the door casing 3, which casing is insulated from the inner casing 5 and by insulating the door, when closed, from the inner casing that the heat which is applied to the outside of the safe will not be conducted to the inside and consequently any contained and otherwise perishable matter within the safe will not be destroyed or injured.

While I have illustrated and described a particular embodiment of my invention, it has merely been for the sake of convenience and I do not wish to be limited to that particular embodiment as it is obvious that numerous changes may be made in the details of construction without departing from the spirit of the invention or exceeding the scope of the appended claim.

In Fig. 5 of the drawings there is shown a modification wherein the channel 8 does not have the narrowed forward extension illustrated in Figs. 1 and 2 of the drawings.

What I claim is:—

In a safe, the combination with outside and inside metallic casings, of a door casing mounted on the outside casing, means for insulating the outside casing and the door casing from inside casing, a door including a metallic frame hinged to the door casing, a plate carried by said frame, a second plate carried by but in spaced relation to the frame, insulating material disposed between said plate and between the last mentioned plate and the frame, a plate secured to the last mentioned plate and adapted to close the inner casing and insulating material disposed between the last mentioned plate and the adjacent plate on the door frame.

In testimony whereof, I affix my signature, in the presence of two witnesses.

FRANK W. FINKHOUSEN.

Witnesses:

WALTER GEHRES,

CHAS. E. ALSPACH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents Washington, D. C."